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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/256,702

02/24/1999

RANJAN J. MATHEW

NSCIP127/NSP

1148

22434

7590

04/20/2005

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EXAMINER

NGUYEN, DUNG T

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/256,702

Applicant(s)

MATHEW ET AL.

Examiner

Dung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-24 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/02/2005 has been entered.
2. Applicants' amendment dated 12/16/2004 has been received and entered. By the amendment, claims 1-24 are now pending in the application.
3. Applicant's arguments dated 12/16/2004 have been considered but are moot in view of the new ground(s) of rejections as follow.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-8 and 11-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al., US Patent 5,880,795, in view of Kamiya, US Patent No. 6,034,751.

Regarding 1-5, 7-8, 11-14 and 19-23, Nagata et al., figure 3, disclose a liquid crystal display (LCD) device comprising:

a containment structure (57) as claimed

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a liquid crystal display (LCD) cell including a die (52) having a pixel array (52a), a transparent plate (51) and a liquid crystal material (53);

an adhesive seal (54);

a support material (36).

Nagata et al. do not disclose a plurality of spaced apart stabilizers to couple edge portions of the LCD cell. Kamiya does disclose a plurality of spaced apart stabilizers (retaining members 4a, 4b) couple edge portions of an LCD cell (see figure 5). Therefore, it would have been obvious to one skilled in the art to employ a plurality of retaining members in the Nagata et al. as shown by Kamiya in order to absorb an applied shock while retaining an LCD panel detachably (col. 2, lines 40-41).

Regarding claim 6, the modification to Nagata et al. device discloses the claimed invention as described above except for the Alloy Ash 42 based material for the substrate of the containment structure. It would have been obvious to one having ordinary skill in the art at to use the Alloy Ash 42 as a containment substrate material since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claims 15-18, the modification to Nagata et al. device discloses the claimed invention as described above except for wire bonding a plurality of leads from the die to a plurality of leads on the containment structure and an encapsulating material over the plurality of leads. One of ordinary skill in the art would have realized the desire to form a plurality of wire to connect from a plurality of leads on the die to a plurality of leads on the containment structure as well as to cover such wire by an encapsulating material as shown in Applicants' admitted

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prior art (figure 3). Therefore, it would have been obvious to one of ordinary skill in the art to form a connection between a plurality of leads on the die substrate and the containment structure and cover such connection thereon, since it is a common practice in the art to complete an LCD device by connecting an LCD cell to an external circuit.

Regarding claim 24, the modifications to Nagata et al. disclose the claimed invention except for the support material including a thermal grease. On the other hand, Nagata et al. do disclose that to obtain a good heat radiation effect, heat dissipating sheet of elastomer or the like can be used for a support material (36)(col. 8, lines 63-65). Therefore, it would have been obvious to one skilled in the art to use a thermal grease based material for a thermal support layer in order to obtain a good heat radiation effect (col. 8, ln. 63).

Allowable Subject Matter

6. Claims 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

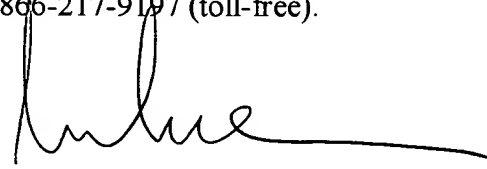
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Nguyen whose telephone number is 571-272-2297. The examiner can normally be reached on Tuesday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN
04/16/2005



Dung Nguyen
Primary Examiner
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